# A NEW ABYSSAL AMAEA (GASTROPODA: EPITONIIDAE) FROM THE NORTH EASTERN PACIFIC OCEAN

## Helen DuShane1

15012 El Soneto Drive Whittier, California 90605

## ABSTRACT

Amaea siapnoi new species, a deepwater epitoniid, is described from a location about 540 nautical miles southwest of Islas Revillagiaedo, Mexico.

Species of *Amaea* are rare in the North Pacific Ocean. Until now, no species of this genus has been reported from the south eastern portion of the North Pacific Ocean. Recently, I have received, on loan, a live-collected specimen of a new species of *Amaea* s. s. for purposes of identification. Deepsea Ventures, Inc., May 1975, retrieved this mollusk from 14,521 feet (4428.60 meters), approximately 540 nautical miles southwest of the Islas Revillagigedo, Mexico.

Superfamily Epitoniacea
Family Epitoniidae
Genus Amaea H. and A. Adams, 1853
[Type species (SD, deBoury, 1909:
Scalaria magnifica Sowerby, 1844]
Subgenus Amaea H. and A. Adams, 1853
Amaea (Amaea) siapnoi DuShane, n. sp.

(Figs. 1 and 2)

Shell medium in size, off-white in color; nuclear and early postnuclear whorls missing, six whorls remaining, gradually expanding to the last whorl; sides of the whorls more perpendicular than in most *Amaea*, giving it a columnar outline; suture well-defined; costae curved and retractive, lamellar near the distinct suture, worn on the whorls, not continuous from whorl to whorl; with a change of slope in the outline of the whorls just below the suture, causing the costae to curve rather abruptly; axial costae on the last whorl 85, of varying thickness, sometimes fusing with adjoining ones, continuous over the

Type Locality—Approximately 540 nautical miles southwest of Isla Clarión, Islas Revillagigédo, Mexico (14°50′ N, 124°29′ W), from a depth of 4428.60 meters.

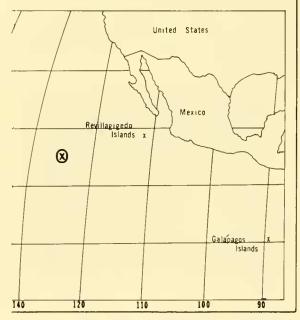


FIG. 1. Map showing approximate location where Amaea (Amaea) siapnoi DuShane, n. sp. was taken in a dredge haul from a depth of 4428.60 meters.

base to the simple lip (outer lip partially fragmented); with a poorly defined basal thread, below which the sculpture is the same as that above; spiral sculpture of approximately 16 to 22 uneven but mostly extremely wide ribs, separated by narrow incised lines that cross the close-set axial costae and impart to the shell a somewhat beaded appearance; aperture round, lip thin; umbilicus lacking; operculum dark, round, horny. Length 34 mm, width 12 mm (holotype).

<sup>&</sup>lt;sup>1</sup> Museum Associate, Department of Malacology, Los Angeles County Museum of Natural History, Los Angeles, California 90007.

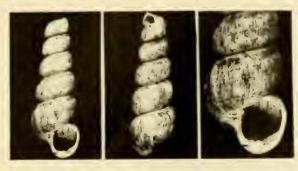


FIG. 2 Amaea (Amaea) siapnoi DuShane, n. sp. Left: Ventral view. Length 34 mm, width 12 mm. Center: Dorsal view. Right: Anterior portion enlarged to show poorly defined basal thread.  $\times$  2

Type Material—Holotype, Department of Marine Invertebrates, San Diego Natural History Museum, San Diego, California: SDSNH 65482.

Etymology—The species name honors the chief scientist of Deepsea Ventures, Inc., William Siapno.

# DISCUSSION

Deepsea Ventures, Inc., working out of San Diego, California, is involved in exploratory mining for manganese nodules. William Siapno, chief scientist of Deepsea Ventures, Inc., collected this new species in May 1975. Other material in the dredge haul included coarse, gritty manganese that still adheres to the shell, manganese nodules, large *Carcharodon* teeth, pelagic shark teeth (probably of Miocene age), a whale ear-bone, small brittle stars, and worm tubes.

The nuclear and immediate post-nuclear whorls of the holotype are missing. One can only conjecture that the live-taken specimen was damaged in the dredge as it was retrieved.

Among the other Amaea collected in deep water are Amaea (Scalina) ferminiana (Dall, 1908) from 118 to 1333 m off the coast of Peru by the SEPBOP Program on the vessel ANTON BRUUN (DuShane, 1974: 55); Amaea (Scalina) pompholyx (Dall, 1908) collected in 1485 m near the Galapagos Islands by the ALBATROSS (station 2807) in ooze (DuShane, 1974: 56). These are

the only two records of Amaea (Scalina) from deep water in the tropical eastern Pacific; these depths do not approach the depth from which the present species was taken. Comparison with Amaea luxus Okutani, 1964, collected 56 miles off Aogashima Island (32° 20′ N, 140° 55.5′ E), in from 3,150 to 3,350 m, shows the two species to be congeneric, each with an usually large number of costae. The live-taken specimen of luxus differs by having 140 (instead of 84) close-set costae on the last whorl, a very elongate shell with 15 whorls, and a hardly distinguishable basal disk.

# **ACKNOWLEDGMENTS**

To the following people I am indebted in many ways: Drs. Myra Keen, Professor Emeritus, Stanford University and George Radwin, Department of Marine Invertebrates, San Diego Museum of Natural History, for reading preliminary drafts of the paper and providing constructive criticism; to Bertram Draper, Museum Associate, Los Angeles County Museum of Natural History, for the photographs; to Anthony D'Attilio, Department of Marine Invertebrates, San Diego Museum of Natural History, for the map; to William Siapno, Deepsea Ventures, Inc., and Dr. Hugh Bradner, University of California, San Diego, for their help in obtaining the holoptye for examination and description.

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